

CLAIMS

Claims 1-64 (Canceled)

65. (Previously Presented) A method of carrying out at least two processing steps on a workpiece, the method comprising the steps of:

lowering the workpiece into a lower section of a chamber;

carrying out a first processing step to remove conductive material from the workpiece in the lower section of the chamber;

raising the workpiece from the lower section to an upper section of the chamber;

positioning a movable guard between the lower section and the upper section that is adapted to prevent liquid introduced into the upper section of the chamber from entering the lower section of the chamber; and

carrying out a second processing step on the workpiece in the upper section using the liquid, whereby the liquid is prevented from entering the lower section of the chamber only by the movable guard.

66. (Previously Presented) A method according to claim 65, wherein the first processing step comprises one of polishing and etching the conductive material from a surface on the workpiece.

67. (Original) A method according to claim 65, wherein the second processing step comprises one of rinsing, cleaning, depositing on, etching, modifying, and drying a surface on the workpiece.

68. (Amended) A method of carrying out ~~at~~ at least two processing steps on a workpiece, the method comprising the steps of:

carrying out a ~~second~~ first processing step on the workpiece in an upper section after positioning a movable guard between the upper section and a lower section of a chamber, the first processing step using a liquid;

repositioning the movable guard such that the workpiece can be lowered into the lower section of the chamber;

lowering the workpiece into the lower section of the chamber; and

carrying out a ~~first~~ second processing step on the workpiece in the lower section of the chamber, the second processing step taking place after the first processing step.

69. (Amended) A method according to claim 76, wherein the ~~first~~ second processing step comprises one of polishing and etching the conductive material from a surface on the workpiece.

70. (Amended) A method according to claim 68, wherein the ~~second~~ first processing step comprises one of rinsing, cleaning, depositing on, and etching, ~~modifying, and drying~~ a surface on the workpiece.

71. (Original) A method according to claim 70, wherein the step of etching or modifying further comprises the step of providing a gas to the surface of the workpiece from a group consisting essentially of O₂, CF₄, Cl₂, and NH₃.

72. (Original) A method according to claim 71 further comprising the step of heating the workpiece while the gas is provided to the surface of the workpiece.

73. (Previously Presented) A method according to claim 65, wherein the first processing step further includes the step of electro chemically depositing the conductive material on the workpiece.

74. (Previously Presented) A method according to claim 65, wherein the first processing step electro chemically removes the conductive material from the workpiece.

75. (Previously Presented) A method according to claim 65, wherein the second processing step comprises the step of chemically etching the workpiece in the upper section.

76. (Amended) The method of claim ~~68~~ 89 wherein the step of carrying out the ~~first~~ second processing step includes removing conductive material from the workpiece in the lower section of the chamber.

77. (Amended) A method according to claim 76, wherein the ~~first~~ second processing step further includes the step of electro chemically depositing the conductive material on the workpiece.

78. (Amended) A method according to claim 76, wherein the ~~first~~ second processing step electro chemically removes the conductive material from the workpiece.

79. (Amended) A method of processing a workpiece using a vertical multi-chambered processing module comprising the steps:

removing conductive material from the workpiece in a first chamber;

transferring the workpiece to a second chamber vertically disposed ~~with respect to~~ above the first chamber;

isolating the first chamber from the second chamber using only a movable guard that is adapted to prevent liquid introduced to the second chamber from entering

the first chamber; and

modifying the workpiece in the second chamber using the liquid, whereby the liquid is prevented from entering the first chamber only by the movable guard.

80. (Previously Presented) A method of claim 79, wherein the removing step further includes the step of depositing a material on the workpiece.

81. (Previously Presented) A method of claim 79, wherein the removing step further includes the step of electro chemically mechanically depositing a conductive material on the workpiece.

82. (Previously Presented) A method of claim 79, wherein the removing step includes polishing the conductive material from the workpiece.

83. (Previously Presented) The method of claim 79, wherein the removing step includes electro chemically removing a conductive material from the workpiece.

84. (Previously Presented) The method of claim 79, wherein the modifying step includes cleaning a surface of the workpiece.

85. (Previously Presented) The method of claim 79, wherein the modifying step includes chemically etching a surface of the workpiece.

86. (Previously Presented) The method of claim 79 wherein the step of removing conductive material from the workpiece in a first chamber is performed so that a surface of the workpiece being operated upon is disposed in a substantially horizontal orientation.

87. (Previously Presented) The method of claim 65 wherein the first process step in the lower chamber is performed so that a surface of the workpiece being operated upon is disposed in a substantially horizontal orientation.

88. (Previously Presented) The method of claim 68 wherein the first process step in the lower chamber is performed so that a surface of the workpiece being operated upon is disposed in a substantially horizontal orientation.

89. (New) The method according to claim 68 further including the steps of:

raising the workpiece into the upper section of the chamber;

repositioning the movable guard between the upper section and the lower section of the chamber; and

carrying out a second third processing step on the workpiece in the upper section of the chamber, the third processing step taking place after the second processing step.

90. (New) A method according to claim 89, wherein the third processing step comprises one of rinsing, cleaning, depositing on, etching, modifying, and drying a surface on the workpiece.